



Finding of No Significant Impact Keys (Desert Queen) Ranch Comprehensive Plan Environmental Assessment

January 22, 2005

Joshua Tree National Park

FINDING OF NO SIGNIFICANT IMPACT

Keys (Desert Queen) Ranch Comprehensive Plan Environmental Assessment, Joshua Tree National Park

The National Park Service (NPS) has completed the environmental analysis process for the Keys Ranch Comprehensive Plan in Joshua Tree National Park.

Purpose and Need

Numerous attempts at planning for the future of the Keys Ranch in Joshua Tree National Park resulted in a disjointed series of unfinished plans (Pepito 1997, Spearing 1999, McCutchen 2001), proposed recommendations (Greene 1983, National Park Service 1995, National Park Service 2001) and site planning priorities (National Park Service 1990, National Park Service 2001b, National Park Service 2005a) for the Keys Ranch Historic District. As a result, a comprehensive management plan is needed to identify and prioritize appropriate old and new recommendations based on the recently completed cultural landscape inventory (National Park Service 2004) and other applicable planning documents. The purpose of the Environmental Assessment is to evaluate alternative management strategies to guide better cultural and natural resources management and protection and park operations at Keys Ranch.

Planning Issues

Applicable issues included how to facilitate site preservation, including how historic structures should be stabilized and whether or how to reintroduce missing landscape features; how to facilitate public use; and how to resolve operational issues, such as implementation of cultural cyclic maintenance or rehabilitation recommendations, interpretation and site caretaking. Issues that arose during planning for Keys Ranch follow:

Cultural Resources

Historic Buildings and Structures

- Keys Ranch Historic Structures have suffered under multiple cultural resources evaluations with differing conclusions about the significance of the ranch.
- Some important historic structures have suffered loss of historic fabric (Adobe Barn, McHaney Cabin); others may be lost without immediate actions to preserve historic fabric (Adobe Fireplace Ruin, Stamp Mill Ruins).
- While many historic structures have been documented (including through the Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER), some ranch and mining resources have yet to be thoroughly investigated (Keys proposed site of new house, etc.).
- Cultural Landscape Inventory recommendations for structures on the National Register have not been systematically or fully implemented.
- Administration of the site has resulted in the construction of non-historic buildings structures within the Historic District (including the parking area, vault toilet and caretaker's trailer site). Other non-contributing temporary additions include: water tanks, table underneath motor, outhouse, and the shed near the Volunteer site.

Landscape

- Some fruit trees from non-historic source genetic material have been planted within the historic orchard; some have died.
- Planted fruit trees contain memorial plaques that do not conform to National Park Service policy.
- The Fire Management Plan does not contain a prescribed fire component.
- Historic vegetation has been lost; native and non-native vegetation is growing up through the objects and structures.
- The optimal level for maintenance of water in the reservoirs is unknown for orchard maintenance.

Objects

- The significance of the non-museum objects at the Keys Ranch needs to be evaluated so the park can prioritize their protection/preservation, deciding which are the most important to preserve and how to preserve them, and conversely which can be let go.

- Over time, many objects left at the ranch have been sorted, removed by park staff and family members, or stolen. Some of these may still be in nearby communities.
- Cultural resources managers have not verified the correct historic locations of some equipment.

Oral History

- Keys' family members who lived at the ranch are still around and could provide additional oral histories about how the ranch was used.
- Community members who visited the Ranch during the Keys era or who knew the Keys family well may also be able to provide additional information.

Archeology

- The Keys Ranch and surrounding area contain multiple archeological sites distributed over time whose resources have not yet been fully documented.
- No report has yet been received on the detailed archeological test excavations / survey transects conducted in 1987 and 1998 within the Keys Ranch.

Museum Collections

- A Museum Management Plan is available and contains recommendations for the Keys Ranch.
- Some objects still at the ranch have been accessioned into the museum collection, but are not being preserved and either need to be de-accessioned or moved into collections storage.

Natural Resources

- The park currently has one of the healthiest herds of desert bighorn sheep in California according to the California Department of Fish and Game's bighorn sheep expert. The health of this population may be attributed to the Keys Ranch reservoirs.
- Five sensitive plant species occur in the vicinity of the Keys Ranch (within the current administrative closure).
- The optimal level for maintenance of water in the reservoirs is unknown for wildlife.
- Invasive non-native species are part of the cultural landscape at Keys Ranch.

Interpretation

Current Visitor Use

- During the peak season (winter-spring), the park currently conducts a limited number of fee demonstration / tour fee-funded guided tours of the ranch.
- Approximately 19,000 school children per year are served through the curriculum-based education program offered at the ranch.
- The current public interpretive program is estimated to contact less than one percent of the park's visitors each year.
- To fulfill the intent of the Historic Sites Act and the California Desert Protection Act, more visitors should be offered the opportunity to learn about the Keys Ranch.

Telling the Keys Story

- The relationship of the Keys Ranch and other Keys family ranch resources (both within and outside of the Historic District) throughout the park is minimally interpreted. Currently, the ranch site is the only portion of the Keys Ranch Historic District where interpretation of Keys' story is focused.
- The story of Bill Keys' family members' lives (belief system, motivations, experience of desert life, and women's lives on the ranch) is missing. Much of what is interpreted is based on the physical evidence of Keys' work.
- While self-guided tours have been considered, security of objects is a concern.
- Keys' family members who lived at the Ranch are still around and could provide additional oral histories about how the Ranch was used.
- Community members who visited the Ranch during the Keys' era or who knew the Keys' family well may also be able to provide additional information.

Park Operations

Administration

- The Keys Ranch interpretive program is not base-funded.
- Priorities for preservation/use of the site need to be integrated through all park divisions.
- The park does not have enough funding or staffing to preserve it all.
- Site caretakers need access to communications equipment, water, power and waste removal.
- The park has only consistently been able to secure a volunteer presence for about 6 months of the year.
- Minimal partnerships exist within the community to manage the ranch – the park could expand on relationships with the Twentynine Palms Historical Society and the Desert Institute.
- Preservation maintenance of the site is not base-funded.

Fire Management

- Buildings, structures and other resources are vulnerable to structural and wildland fires.
- No structural fire plan exists for Keys Ranch resources.
- Vegetation management and other structural fire strategies are not employed at the Keys Ranch.
- Native American fire management practices are unknown.
- Structural or wildland firefighting resources are unavailable in close proximity to Keys Ranch. The Black Rock fire center has a 30-minute response time to the ranch.

Maintenance

- The park has not prioritized preservation of Keys Ranch resources
- There is no systematic preservation plan for Keys Ranch resources.
- The existing maintenance program is reactive rather than proactive.

Security

- An on-site caretaker or expanded interpretive program is needed to deter vandalism and theft of historic objects.
- The caretaker presence requires a radio antenna since handheld radios do not reliably work from the Keys Ranch.
- Caretakers are not officially authorized to contact intruders (due to potential threat), but often do.
- The current 117-acre administrative closure deters most unauthorized visitors.

Safety

- The five dams associated with the Historic District's three reservoirs are in unknown to poor condition.
- Staff members have Hantavirus concerns about structures with rodent infestations.
- Some staff has concerns about visitor interactions with the objects at the site however no safety incidents have been reported.
- Visitor safety issues at the Keys Ranch have been almost wholly related to heat tolerance.
- Hazardous materials may still be present at the machine shed and stamp mills.

Selected Alternative

Alternative 3: Moderate Inward Focus [Preferred]

(Enhanced Prioritized Protection and Selective Restoration of Keys Ranch Resources and Multi-Faceted Interpretive Programming Leading to Additional Restoration/Use of Keys Ranch Resources)

By enhancing preservation of historic resources at the Keys Ranch, the Selected Alternative will provide visitors with multiple interpretive opportunities to experience firsthand these historic resources (including helping to facilitate their protection through community historic preservation workshops).

The proposed action will have an emphasis on developing partnerships with a wide range of groups and individuals to restore use of certain key features and functions of the site to working order – with a focus on the Keys Ranch core area.

Historic Structures/Landscape

Following stabilization or repair of the highest priority buildings and structures, the park will systematically repair or rehabilitate all buildings and structures on or eligible for the National Register in priority order and on a cyclic basis. Under the Selected Alternative, buildings and structures will not only undergo stabilization and repair; they could also undergo rehabilitation and/or restoration to their historic appearance (including some interiors) or working condition (structures).

The Selected Alternative includes restoration of the outward appearance of the Ranch House and replacement of the missing adobe barn with a structure of compatible form and character that will be used to protect key pieces of working or restored equipment and to support other ranch needs. As funding allowed, other buildings could be treated to allow visitors to step inside roped entrances, instead of just peering in through windows at restored historic scenes.

This Alternative also calls for regular, rather than opportunistic conditions monitoring surveys, to ensure routine actions that will prevent further deterioration of historic structures, prior to catastrophic problems. Additional research on specific aspects of the Keys Ranch operations, including a Cultural Landscape Inventory of all sites related to Keys' mining endeavors and a Cultural Landscape Report (CLR) for the core area of the Ranch will also occur.

A series of specific actions to preserve historic vegetation will also occur. The Cultural Landscape Report would include specific vegetation management recommendations for the Ranch. Missing historic vegetation, including the cottonwoods by the house and other specimen trees will be restored, according to historic documentation. The gardens would be cleared and/or replanted. The park will explore options for additional restoration of the orchard and will research historically used orchard species, creating back-up genetic stock for replacing existing historic pear trees. If the recent plantings were determined incompatible, they could be replaced but could be relocated elsewhere in the park to honor their original memorial intention.

Restoration of the windmill water and irrigation operations will also occur so that the water could be used for Ranch operations, including watering of the restored orchard, gardens or representative agricultural areas.

Serious consideration will be given not only to restoring the pug, one stamp or Chilean mills, demonstration arrastra and to food related (canning) equipment but also to obtaining demonstration equipment if use of the real objects would result in their deterioration.

Non-Contributing Structures and Objects

To the degree possible, pending deterioration and/or special funding, the park will remove, disguise, and/or relocate non-contributing elements in the historic landscape, particularly within the upper Ranch area – such as the chemical toilet and the water tanks.

Museum Collections

The Selected Alternative will go beyond preservation maintenance actions for the existing Keys Ranch Collection and include canvassing nearby cities like Twentynine Palms and Joshua Tree for objects associated with the Keys Ranch to use (as appropriate and acceptable to the owner, as applicable) for demonstrations, collaborative museum display or for research.

Besides documenting and preserving existing oral histories, the park will systematically identify, conduct and document oral histories with people in Twentynine Palms, Joshua Tree and the vicinity, or even further, who have personal stories regarding Keys Ranch.

As called for by the GMP (National Park Service 1995), an exhibit plan for the proposed gateway visitor center focusing on human history (especially that of Native Americans and Keys Ranch) will be developed during the planning for that structure.

Historic Furnishings Plans, such as populating the schoolhouse with desks or the cottages with existing bed frames, will also be developed for Keys Ranch structures.

Non-Museum Objects

There will be additional focus on considering the restoration of selected equipment to working condition, with priority given to equipment and objects that have recently been operable. Over the long-term, upon consultation with applicable experts, the park would move to restore additional equipment and objects, desired for use or discussion by the interpretive program or for demonstration of real or representative equipment as the community outreach program develops.

Visitor Access, Circulation and Caretaker Facilities

While most facility visitor experiences will continue to be peering in the windows or walking through the accumulation of items that might be useful, as appropriate there would begin to be opportunities to step inside some structures to get a better feel for the Keys' living conditions. In addition, visitors will begin to understand through explanations or demonstrations of stabilized, repaired or restored equipment, the routine work that was done at the Ranch.

Ranch boundary closure areas will be retained where needed for resource protection, however, the park will explore reducing the size of the administrative closure to the minimum necessary to protect these resources. Other visitor, circulation and caretaker facilities would remain or would be modified to enhance their compatibility with the Historic District or to provide additional visitor services.

Interpretation

Approximately 50 percent of park visitors will be provided with an opportunity to learn about Keys Ranch resources. To facilitate this, interpretive opportunities will be expanded to offer an increasingly broad spectrum of activities over time as equipment was restored, community partnerships established and better site preservation (stabilization, repair and restoration) ensues. For example, demonstration tours could be offered as Ranch equipment was restored to working order. Over the long-term, the park will take advantage of opportunities to tell more of the natural resources / Native American connection to Keys Ranch, focusing on what brought Keys to the desert and what enabled him to prosper.

As greater focus on the Keys Ranch as a premiere park cultural resources site occurred, the frequency of tours will also increase and the park may experiment with conducting limited (monitored) self-guided tours of Keys Ranch.

As tour opportunities increased and expanded their focus, the park would publish an insert or schedule of Keys Ranch themed experiences, including tours, educational programs, campfire programs, and experiences offered at other nearby related park and community sites. In addition, the park will seek funding for a Keys Ranch orientation film and begin to add consistency and breadth to the existing exhibits about the site located throughout the park, perhaps telling the story of how Keys View is related to Bill Keys and expanding the story of Keys' relationship to Barker Dam and other areas used for cattle grazing and mining.

A series of thematic wayside exhibits will be developed to interpretively link Keys sites throughout the park and community, including, for instance, the Keys murals in Twentynine Palms and along the route Keys took to get to Banning. Brochures, related to specific issues of interest at Keys Ranch, would also be developed.

Finally, partnerships with the Desert Institute (a private non-profit educational organization) will be established to support the interpretive program at Keys Ranch and to offer extended interpretive opportunities and workshops to general park visitors as well as community groups.

Education

In the short-term, the educational program would remain the same, over the long-term additional themes will be added to the education program, allowing educators a wider choice and opportunities for repeat visits to more fully understand early desert homesteading.

Other Natural and Cultural Resources Management

Archeological site testing of other historic areas of significance associated with Bill Keys (beyond the Keys Ranch core) will be conducted to gain additional contextual information about Ranch operations and Keys' influence in the region.

To further minimize the spread of non-native invasive species, the park will restore denuded sites not being managed as part of the Keys Ranch Historic District, to native desert vegetation. Specific monitoring and management of the non-native invasive reed grass (*Arundo donax*) will also occur.

Partnerships

Over the short-term, partnership actions will focus on seeking additional funding and relationships, however, a greatly expanded partnership program would eventually be part of the Selected Alternative. To support it, the park will seek additional internal and external sources of staffing and funding. Strong partnerships with local communities would be developed and the park would explore opportunities to partner with local historical societies, preservation groups, 4-H or scouting organizations, and local business interests that could both support (adopt) the restoration of specific pieces of equipment or could assist with doing applicable work.

There will be a focus on getting local groups to help manage the Keys Ranch and to maintain and enhance local interest and involvement in the preservation of the site. If a year-round caretaker could not be obtained, a short-term caretaker rotating volunteer schedule would be developed among interested individuals and groups. Organized groups, including Elderhostel courses, researchers, adult education groups, etc. would assist in the restoration of the Ranch under the expertise gained from developing relationships with specialists.

Research partnerships will also be developed with educational institutions to further explore and elucidate the historical context of Keys Ranch.

Administration/Maintenance

Administrative actions will initially focus on securing permanent funding for interpretive and partnership programs, on implementing the recommendations of the Museum Management Plan and Fire Management Plan and on securing funding for historic preservation. Later maintenance support facilities could be developed to support the proposed expanded operations, with additional storage being located in a rehabilitated historic structure, in a compatible structure located in place of the adobe barn or elsewhere as appropriate and as disguised from the viewshed of the Historic District. In addition, staff would seek out training to be able to assist in the restoration of equipment and structures.

Dams

Pending additional analysis of preliminary Bureau of Reclamation recommendations, the following actions will be considered:

- Keys Ranch reservoir: Limit water holding volume and consider reconnecting the dam to the transport and irrigation system for onsite water storage, firefighting capability and other uses.
- Barker Dam reservoir: Continue to maintain for recreational and scenic values. If needed, enact seasonal closures to protect employees and visitors during periods of high water.
- Cow Camp reservoir: Conduct preservation maintenance until it becomes physically impossible to maintain the dam; then consider other options.

Fire Management

To ensure long-term preservation of Keys Ranch structures, vegetation setbacks will be evaluated for Ranch buildings and/or irrigation will be used to increase fuel moisture in the vicinity of Ranch buildings.

Safety/Security

The park will explore options for technological monitoring and alarming to enhance protection of Keys Ranch. As appropriate, particularly with increased interpretive programming and preservation maintenance, the park will increase the frequency of staff presence at the Ranch.

The following actions (identified as Common to All in the Environmental Assessment) will also be implemented as part of the Selected Alternative. They consist primarily of a series of historic preservation and rehabilitation strategies that would secure the future of the Keys Ranch as the park's premiere cultural resource. These actions also address a number of the issues raised during internal (National Park Service and park) and external (public, agency and organization) scoping. Although many of these may be similar to the actions currently being carried out under existing operations, they differ in breadth, in that they consist of more systematic and comprehensive planned management strategies for maintaining Keys Ranch resources, instead of similar strategies implemented as time, funding and opportunity permits.

Cultural Resources

Historic Structures

- Stabilize remaining historic fabric and conduct preservation maintenance actions on remaining historic structures associated with Keys Ranch structures listed on the National Register of Historic Places.
- Systematically inventory and conduct conditions surveys for buildings and structures associated with the Keys Ranch.
- Inventory and document any remaining historic resources not already part of the Keys Historic District

Landscape

- Where possible, remove or enhance compatibility of non-contributing elements.
- Identify and maintain the historic landscape to ensure no additional loss of character defining features.
- Manage native, historic native and non-native vegetation to avoid damage to structures from vegetation encroachment.
- Develop a Cultural Landscape Report, including recommendations for vegetation/orchard/irrigation management for the ranch.

Museum Collections

- Preserve Keys Ranch museum collections.
- Implement recommendations of Museum Management Plan (*see asterisked items below*).
- *Prepare Historic Structures Reports for the buildings and Historic Furnishings Reports for applicable structures.
- *Prepare a Cultural Landscape Report for the site to establish a treatment plan for the area as a whole. The Cultural Landscape Report should include a grid-applied documentation of the machinery and tools at the ranch as well as treatment plans for these major items and concentrations of smaller materials. The end product would be both full documentation of all associated parts of the resource and a series of interlocking plans for the maintenance and preservation of the Ranch as a whole (National Park Service 2005:62).
- *Systematically inventory, record, identify and assess the artifact assemblages at the Ranch.
- *De-accession cataloged items at the ranch.
- *Complete a provenance search for cataloged items in storage. Consider de-accession and repatriation of those items to the ranch site on a case-by-case basis.
- *Maintain a limited collection of personal objects from the Keys family that could be used for exhibit at locations away from the ranch site.
- *Process the Keys archives, create a finding aid to this material, and make it electronically available.

Oral History

- Preserve existing oral histories by creating transcripts and back-up copies.

- Conduct new oral history interviews; create transcripts and back-up copies.

Objects

- Continue to display representative non-collection items at the Keys Ranch.
- Maintain some Keys Ranch equipment in working order.
- Secure industrial curator to identify priority objects for preservation and treatment.
- Investigate feasibility of stabilizing mills.

Archeological Resources

- Conduct additional inventory and monitoring of historic and prehistoric archeological resources at Keys Ranch and associated sites.
- Document results of archeological site testing.
- Stabilize archeological sites.

Ethnographic Resources

- Inventory, document and preserve ethnographic resources as they are identified.
- Continue to allow repatriation of ethnographic resources as desired by local Native American Indian communities.

Natural Resources

- Systematically inventory and implement removal of non-native invasive plants
- Continue to inventory and monitor populations of rare plants, desert bighorn sheep and desert tortoise as well as other key species at the Keys Ranch.
- Retain restricted access to areas that support sensitive rare, threatened and endangered species.
- Develop guidelines for the collection and use of native materials to aid in the preservation of Keys Ranch resources – for example, the Joshua Tree corral fence.

Interpretation and Visitor Experience

Visitor Opportunities

- Expand interpretive and educational programming operations.
- Increase the availability of written materials about Keys Ranch.

Visitor Access

- Increase the number of visitors who have an opportunity to experience Keys Ranch resources
- Use historic roads and trails for access, minimizing any new non-contributing additions to the Historic District.
- Take advantage of opportunities to increase accessibility of Keys Ranch resources.
- Maintain historic fencing alignments.

Partnerships

- Seek new sources of funding and staffing to support Keys Ranch operations.
- Seek partnerships within the local community and beyond, as well as with groups of experts with experience related to preserving the kinds of objects and structures related to the Keys Ranch.
- Increase National Park Service capacity to support a partnership or volunteer coordinator to develop partnerships with local communities and organizations.

Park Operations

Administration

- Establish funding mechanisms to continue interpretive and educational programming and to ensure preservation maintenance and caretaker function.
- Seek new funding sources and/or cooperative partnerships to preserve Keys Ranch resources.
- Develop a line item project list of every aspect of implementation. Immediately following approval of the plan, prioritize preservation and maintenance on a case-by-case basis.

Dams

- Investigate the feasibility of Preliminary Alternatives (as described herein) for Keys Ranch dams including implementing Bureau of Reclamation recommendations.
- Allow some water capacity in reservoirs (recognizing seasonality of resource).

Fire Management

- Adopt recommendations of Fire Management Plan.
- Use recently completed plan as a catalyst for an improved fire management strategy at the Keys Ranch.
- Identify and ensure some level of structural and wildland fire fighting resources/response in vicinity of Keys Ranch.
- Develop structural fire protection strategy for vulnerable resources at Keys Ranch (protection from ignition sources – lightning, wildland fire, arson, physical modifications to environment – defensible space, appropriate equipment on site).

Maintenance

- Develop cyclic maintenance plans for all List of Classified Structures (National Register) listed buildings and structures.
- Develop and implement phased priority restoration/maintenance plans.
- Conduct routine cyclic maintenance to replace building materials as needed.

Security

- Maintain day use only (restricted) operations.
- Explore ways to maintain caretaker presence.

Safety

- Increase safety of operations at Keys Ranch through implementation of staff and volunteer training, tailgate safety sessions and systematic analysis of operations.
- Determine need for and conduct hazardous materials surveys at the Keys Ranch. Implement recommendations as required under applicable policy and law.
- Follow existing preliminary investigation report recommendations (mill site clean-up).

Summary of Other Alternatives Considered

Four other alternative visions for the future management of this National Register property were considered. These alternatives were derived from the initial direction provided in the Joshua Tree National Park General Management Plan/Development Concept Plans Environmental Impact Statement (National Park Service 1995), from interdisciplinary team, public, agency and organization comments and from other planning documents, most notably the Cultural Landscape Inventory for the Keys Ranch Historic District (National Park Service 2004), and included:

Alternative 1: No Action (Continue Current Management: Non-Systematic Protection of Keys Ranch)

This alternative would continue to protect Keys Ranch resources on a case-by-case basis, as time and funding permit and/or as needed.

Alternative 2: Minimum (Systematic, Prioritized Protection of Keys Ranch Resources)

Through a series of systematic, prioritized preservation maintenance actions, this alternative would enhance visitor safety and protection of Keys Ranch resources listed on the National Register of Historic Places.

Alternative 4: Moderate Outward Focus (Enhanced Prioritized Protection and Selective Restoration of Keys Ranch Resources with Increased Opportunities to Understand Ranch Resources within the Context of the Desert Homesteading Experience)

In addition to the actions called for by Alternative 2, this alternative would enhance the historic setting of the Keys Ranch and provide visitors with opportunities for heightened understanding of the relationship of the ranch to other park resources, desert homesteading in local communities and the modern expansion/current context of desert living.

Alternative 5: Maximum (Enhanced Prioritized Protection and Widespread Restoration of Keys Ranch Resources coupled with Multiple Interpretive Opportunities for Connecting the Keys Ranch Experience to Other Park Resources and Communities beyond the Park)

In addition to the actions called for by Alternative 2, this Alternative would restore the historic setting and a working landscape to the Keys Ranch that would be supported by the park and community. Visitors would have greatly enhanced understanding and experience of Keys Ranch Resources.

Although each of the action alternatives contained the same basic preservation strategy for cultural resources listed on the National Register of Historic Places, they differed in what would have been accomplished by going the next step in management of the resource as a whole and in how visitors would experience that resource.

Alternatives Considered But Rejected

Full Restoration of Keys Ranch Dams (Keys, Barker, Cow Camp)

This alternative has been rejected based on very high projected costs from the Bureau of Reclamation and because of the uncertainty of the feasibility of repair without removal of most historic fabric.

Benign Neglect of Keys Ranch Resources

This alternative was considered in previous planning documents, however, it would not meet the mandate of the National Park Service under its own policy and that associated with the National Historic Preservation Act and National Register of Historic Places to preserve historic structures, including the Keys Ranch Historic District.

Environmentally Preferred Alternative

As described in the National Environmental Policy Act, the Environmentally Preferred Alternative is the alternative that would:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- Ensure for all Americans, safe, healthful, productive and esthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- Preserve important historic, cultural and natural aspects of our natural heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Generally, these criteria mean the environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment and that best protects, preserves, and enhances historic, cultural, and natural resources (46 FR 18026 – 46 FR 18038). (Council on Environmental Quality, “Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations” [40 Code of Federal Regulations 1500-1508], Federal Register Volume 46, Number 55, 18026-18038, March 23, 1981: Question 6a.).

In this Environmental Assessment, the Alternatives that best meet these criteria are Alternatives 3 and 4, which would include rehabilitation and restoration of some Keys Ranch structures and a series of other actions that would enhance the visitor experience at the Ranch. Alternatives 1 and 2 would not be environmentally preferred because they meet only basic cultural resources preservation mandates and would result in many fewer people being able to experience Keys Ranch resources. Alternative 5, on the

other hand, would have a series of environmental impacts beyond those that would occur in Alternatives 3 and 4 and which would focus on resource use over preservation.

Description of Impacts and Mitigation

As documented in the Environmental Assessment, the National Park Service has determined that the selected alternative can be implemented with no significant adverse effects on soils, water quality, vegetation, wildlife, special status species, prehistoric and historical archeology, ethnographic resources, historic structures and cultural landscapes, visitor experience, or park operations.

The National Environmental Policy Act requires that decision-making regarding the analysis of significance be based on analysis of the proposed action with respect to the following factors:

Beneficial and Adverse Effects

The selected alternative has a wide range of beneficial and adverse effects (see Impact Mitigation Matrix below). As shown below in the impact mitigation matrix, these short- and long-term effects would not result in impairment.

Degree of effect on public health or safety

The selected alternative will not adversely affect public health or safety. The park has adopted closure strategies for the Keys Ranch during times of heavy rainfall and full pool conditions in the Keys Ranch Reservoir and under the strategies contained in this Comprehensive Plan would avoid full-pool conditions in the Keys Ranch Reservoir. Water is pumped from the reservoir to avoid its overtopping during occasional full pool conditions.

A series of inspection and maintenance strategies are used to manage the historic dams, including the cessation of tours during unsafe conditions. It is therefore unlikely that visitors would be in the area if full-pool conditions were to cause dam failure.

The National Park Service will continue to acknowledge the potentially hazardous condition of the Keys Ranch dams by avoiding high concentrations of visitors at the site during unsafe (high water) conditions. Additional research and consultation with the Bureau of Reclamation regarding long-term solutions for the dams will continue to be pursued. It is likely that such solutions, when proposed, will require additional environmental analysis.

Unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, wetlands, wild and scenic rivers, or ecologically critical areas

The selected alternative will not impact the unique characteristics of the area, including prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas. The proposed actions call for improvements to the Keys Ranch and will not result in the loss of such characteristics because these characteristics are either not present or not affected by the selected alternative.

Degree to which effects on the quality of the human environment are likely to be highly controversial

There were no controversial impacts or aspects of the proposed project that surfaced during the environmental analysis process. The effects on the human environment are known and have been described in the Environmental Assessment.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

The selected alternative neither establishes a National Park Service precedent for future actions with significant effects nor represents a decision in principle about a future consideration. As a broad, comprehensive plan, it focuses on opportunities that can be achieved and allows for the expansion of these opportunities based on funding and administrative capabilities.

Degree to which the action may adversely affect districts, sites, highways, structures or objects listed on the National Register of Historic Places or may cause the loss or destruction of significant scientific, cultural or historic resources

The selected alternative will have negligible to minor adverse effects (no adverse effect) and moderate beneficial effects on cultural resources. It will not result in the loss or destruction of significant scientific, cultural or historic resources.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat

The proposed project is not likely to adversely affect or would have no effect on any listed species from the actions proposed in the selected alternative.

- Whether the action is related to other actions with individually insignificant but cumulatively significant effects;
- Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks; and
- Whether the action threatens a violation of federal, state or local environmental protection law.

No significant cumulative effects and no highly uncertain, unique or unknown risks were identified during preparation of the Environmental Assessment or during the public comment period. The selected alternative will not violate any federal, state or local environmental protection laws.

Impact Mitigation Matrix

The following summary identifies the impacts and mitigation documented and discussed in the Environmental Assessment. This summary assigns responsibility for ensuring that the measures, which minimize these impacts, are implemented as part of the preferred alternative. There were no highly controversial effects or highly uncertain, unique or unknown risks identified during either preparation of the environmental assessment/assessment of effect or the public review period. The preferred alternative does not violate federal, state, or local environmental protection laws.

All mitigation measures described in this section will be implemented. Further mitigation measures may be developed in response to ongoing informal consultation on this project and may also augment the measures described below. The measures identified below are designed to ensure that impacts to park natural and cultural resources, visitor use/experience and park operations are avoided, minimized or mitigated.

Resource	Impact	Measures to Avoid, Minimize or Mitigate Impact	Responsible Staff
Soils	<p>Over time, area soils have been excavated, moved, added, replaced, plowed, compacted and disturbed as a result of the long-time use of the area for ranching, mining, farming and other activities. The selected alternative would have negligible to moderate, short-and long-term adverse and beneficial impacts. Impacts could range to locally major if dam rehabilitation / reconstruction was needed.</p> <p>There would be ongoing impacts from occasional mixing, trampling and other disturbance of soil resources from periodic replacement of building components, orchard maintenance, road grading, and continued use as an interpretive destination. Occasionally, additional archeological investigation, periodic minor repairs to the dams, and non-native plant removal would</p>	<p>The use of imported materials in restoration or construction would ensure that no contamination of the Ranch area would occur as a result of non-native invasive plants parts or seeds. As necessary treatment of the materials, and equipment used in procuring them, would be cleaned to prevent the importation of invasive species.</p> <p>Restoration of historic vegetation, and outlying disturbed areas would result in negligible to moderate long-term beneficial effects, as vegetation increased and the potential for soil erosion diminished.</p> <p>All actions would take place within the Historic District, an area previously</p>	<p>Physical Science Branch Chief</p> <p>Vegetation Branch Chief</p> <p>Project Managers</p>

Resource	Impact	Measures to Avoid, Minimize or Mitigate Impact	Responsible Staff
	<p>also disturb soil resources.</p> <p>There would also be impacts from preservation maintenance and rehabilitation actions, including insertion or repair of building foundations, replacement in kind of building features and components of historic structures.</p> <p>Other impacts would result from restoration of historic vegetation and outlying disturbed areas; relocation or modification of the radio tower and/or other features incompatible with the preservation of the Keys Ranch Historic District; irrigation system repair (including replacement of individual components); maintenance of historic orchard components; non-native invasive plant removal; improved fire protection strategies such as removal of some vegetation adjacent to buildings or within the site to increase fire protection; stabilization of the mills; and visitor use circulation improvements.</p> <p>Reuse of the adobe hopper and possible rehabilitation for contemporary use of the adobe barn could result in the importation of soil and/or use of park soil resources.</p> <p>There would be no impairment of park soil resources or values as a result of the implementation of the selected alternative.</p>	<p>used for Keys Ranch operations.</p>	
<p>Water Resources: Water Quality and Quantity</p>	<p>There would be continued use of water for orchard watering, emergency provision of water to visitors, provision of water for the site caretakers, water use by wildlife (particularly waterfowl and bighorn sheep) and occasional use of water for firefighting. In addition, water would continue to be needed periodically to facilitate the repair of historic structures and buildings, including the well, irrigation system and rock walls.</p> <p>Future restoration of the irrigation system, irrigation to increase fuel moisture in the vicinity of historic structures and buildings, water use for reconstruction of the adobe barn, restoration of working mills and vegetation could all increase water use. A minor reduction in water use would be achieved as a result of restoration of some areas to native vegetation.</p> <p>There would be no impairment of water resources.</p>	<p>As non-historic denuded areas were restored to native vegetation, water would be retained longer in the vicinity.</p>	<p>Physical Science Branch Chief</p> <p>Vegetation Branch Chief</p> <p>Project Managers</p>
<p>Water Resources: Wetlands</p>	<p>There would be no impacts to wetlands.</p> <p>It is unknown, however, how long the wetlands and the dams which created them can be maintained. In time, it is expected that without major rehabilitation / reconstruction, the dams which have retained the wetlands would fail and/or continue to diminish their water holding</p>	<p>Created wetlands in the vicinity of the dams would be retained to the degree possible, taking into consideration visitor safety and historic preservation (all of the dams are listed on the National Register of Historic Places as part of the Keys Ranch Historic District).</p>	<p>Chief Resources</p>

Resource	Impact	Measures to Avoid, Minimize or Mitigate Impact	Responsible Staff
	capacity.		
Water Resources: Floodplains	<p>The construction and subsequent modification of the Ranch House and nearby structures resulted in an historic need to armor the banks of the creek adjacent to the Ranch House and later to create berms that diverted water away from the house during infrequent periods of high water (flash flooding). The Ranch House and nearby normally dry washes or low flowing creeks in the vicinity of the Keys Ranch are known to have flooded several times during Keys' occupation of the Ranch. The Ranch House and other structures therefore are likely within the floodplain of the unnamed wash and nearby creek and are also located below the Keys Ranch Reservoir, where they would be affected by failure from the Lower Keys Ranch Dam according to BOR analyses.</p> <p>Because the Keys Ranch Historic District contains pre-existing structures and no occupation of these structures is planned and because there would be no occupation of new structures, no compliance with the <i>Executive Order 11988: Protection of Floodplains</i> is required. Further, Director's Order 77-2 does not apply to historic or archeological structures, sites, or artifacts whose location is integral to their significance.</p>	<p>The park has adopted closure strategies for Keys Ranch during times of heavy rainfall and full pool conditions in the reservoir and under the strategies contained in this Comprehensive Plan would avoid full-pool conditions in the reservoir. Water is pumped from the reservoir to avoid its overtopping during occasional full pool conditions.</p> <p>A series of inspection and maintenance strategies are used to manage the historic dams, including the cessation of tours during unsafe conditions. It is therefore unlikely that visitors would be in the area if full-pool conditions were to cause dam failure.</p> <p>The National Park Service will continue to acknowledge the potentially hazardous condition of the Keys Ranch dams by avoiding high concentrations of visitors at the site during unsafe (high water) conditions. Additional research and consultation with the Bureau of Reclamation regarding long-term solutions for the dams will continue to be pursued. It is likely that such solutions, when proposed, will require additional environmental analysis.</p> <p>The potential construction of a replacement barn would not be within regulatory floodplains or potential consequences of possible failure of any of the Keys Ranch dams.</p>	<p>Chief Resources</p> <p>Chief of Maintenance</p> <p>Park Safety Officer</p>
Vegetation	<p>There would continue to be effects related to the accidental or purposeful introduction of exotic plants (for landscaping or human use) at the site. There would also be impacts to vegetation as a result of ongoing non-native plant removal, and vegetation clearing or mowing for fire protection as well as clearing of vegetation adjacent to foundations and/or overhanging buildings during repair or rehabilitation of historic structures and/or additional archeological investigation and site testing.</p> <p>Historic, native and historic non-native vegetation would be managed to minimize encroachment on and to avoid damage to historic structures.</p> <p>The long-term procurement and disposition of native plant materials needed to maintain the ranch, such as Joshua Trees for the unique corral fencing would also result in some impacts.</p> <p>Vegetation would be restored based on historic photographs and in denuded areas not managed as part of the cultural</p>	<p>The park would continue to inventory and remove non-native invasive species.</p> <p>The non-native invasive reed grass (<i>Arundo donax</i>) would be specifically and closely monitored and treatments applied to ensure that it does not spread beyond its historic location at the ranch.</p> <p>These actions and others that would described implementation steps would be part of a vegetation management plan. The vegetation management plan would include set conditions for long-term procurement and use of native materials in restoration of historic structures, such as the Joshua Tree corral fence.</p> <p>Restoration of native species in appropriate areas would decrease the presence of undesirable nonnative species at the Ranch.</p>	<p>Vegetation Branch Chief</p> <p>Project Managers</p>

Resource	Impact	Measures to Avoid, Minimize or Mitigate Impact	Responsible Staff
	<p>landscape. A systematic plan to restore a portion of the historic orchard, including obtaining genetically identical stock and creating back-up storage of genetic material in cooperation with a university or other historic plant seed bank organization would also occur. The plan would address what portion, if any, of the kitchen garden could be restored and would identify the responsibilities for maintaining garden, orchard and landscaping vegetation over time.</p> <p>Vegetation impacts would be short and long-term and would range from negligible to moderate. There would be no impairment of vegetation or values.</p>	Monitoring as well as specific treatment of imported materials during storage and/or before and after importation would occur if necessary to avoid the spread of non-native species.	
Wildlife	<p>Maintaining the dams for their historic significance and as a water source for wildlife would continue to result in intermittent, long-term negligible to minor adverse effects on wildlife as a result of noise and disturbance associated with the work/tours. During most of the day, most of the year, however, there would continue to be no or negligible disturbance of wildlife.</p> <p>The decision to retain the dams in some form, would continue to result in a long-term minor to moderate beneficial effect on desert bighorn sheep and other wildlife that have become dependent on the water sources.</p> <p>Negligible to minor beneficial effects on wildlife would result from the restoration of native vegetation in previously disturbed areas, while negligible incremental adverse effects would result from the reuse of irrigation water that would otherwise be used by wildlife or infiltrate as groundwater. Noise and disturbance associated with the presence of people and their activities at the ranch would continue to contribute additional negligible effects.</p> <p>Replacement construction and/or new construction would contribute a small degree of (negligible to minor) localized short- and long-term adverse impacts (primarily noise and disturbance and the removal of small areas of intact or previously disturbed wildlife habitat). There would be no impairment of wildlife or wildlife values.</p>	<p>Water retained in the dams, as appropriate given safety concerns, would continue to benefit some wildlife.</p> <p>Restoration of some degraded (farming and grazing) areas with native vegetation would increase the availability of habitat and cover for some wildlife.</p>	<p>Chief Resources</p> <p>Wildlife Branch Chief</p>
Special Status Species	<p>The selected alternative would result in an increased potential for impacts from rehabilitation of structures, new construction and other activities.</p> <p><u>Desert Tortoise</u>: Not Likely to Adversely Affect</p> <p><u>Desert Bighorn Sheep</u>: No effect.</p> <p><u>Other rare species</u>: No effect</p> <p>The selected alternative would have no effect on the Coachella Valley milkvetch, the Little San Bernardino Mountains gilia or the Flat-tailed Horned Lizard because these species either do not occur in the vicinity of the Keys Ranch or because proposed</p>	<p>There would be no additional impacts to rare, threatened or endangered wildlife or plants. Because ongoing maintenance and visitor use (guided tours) would continue to occur at the Ranch, ongoing monitoring of sensitive species would continue to occur, including monitoring of the park's population of desert bighorn sheep, rare plants located within the administrative closure and during activities that could affect desert tortoises.</p> <p>Other impacts from implementation of</p>	<p>Vegetation Branch Chief</p> <p>Wildlife Branch Chief</p> <p>Project Managers</p>

Resource	Impact	Measures to Avoid, Minimize or Mitigate Impact	Responsible Staff
	<p>actions would specifically avoid them.</p> <p>There would be no impairment of rare plants or wildlife or the values associated with them.</p>	<p>the selected alternative would be avoided or minimized by avoiding areas of habitat and actions that could affect species.</p> <p>Other sensitive plant species either do not occur in the vicinity of the Ranch or would be avoided by proposed actions.</p> <p>Because the Desert Tortoise does occur at the Keys Ranch and vicinity, but because specific actions would be taken to avoid impacts to them, proposed actions may affect, but would be not likely to adversely affect the Desert Tortoise.</p> <p>Guided tours and other events at the Ranch would continue to stay at least 325 feet (100 meters) from tortoises when they are observed in the area, while maintenance/rehabilitation activities would continue to be focused during tortoise estivation in summer (June – August) and during tortoise hibernation in winter (November – February). When maintenance or rehabilitation activities occur, onsite surveying prior to and during these activities would occur to ensure that they would have minimal or no effects on desert tortoises. These 100% coverage surveys for sign and presence will be performed within 50 meters of any proposed maintenance or rehabilitation activities. If tortoises or sign of tortoises are found and the work cannot be modified or implementation period changed to avoid tortoises and their habitat, the United States Fish and Wildlife Service would be requested to provide technical assistance and/or initiate consultation prior to implementation of the proposed actions.</p> <p>Tortoise education programs will be required for any person working on maintenance or rehabilitation activities prior to implementation of proposed actions.</p> <p>A 25mph and below speed limit will be enforced to minimize tortoise road kills.</p> <p>New construction and relocation visitor facilities would require specific surveys for desert tortoises. Impacts to tortoise habitat would require a 1:1 replacement of equal ecological value.</p>	
Archeological Resources	<p>There would be additional efforts to inventory and monitor historic and prehistoric archeological resources at Keys Ranch and associated sites; to document the results of site testing; and to stabilize</p>	<p>Impacts to archeological resources would be avoided by conducting additional archeological site testing. Actions associated with the Selected Alternative would occur in areas</p>	<p>Cultural Resources Branch Chief</p> <p>Park Interpretive</p>

Resource	Impact	Measures to Avoid, Minimize or Mitigate Impact	Responsible Staff
	<p>known archeological sites.</p> <p>There would be an effort to increase the connections in telling the historic and prehistoric human stories linking the development of the Ranch.</p> <p>The selected alternative would have no adverse effect on archeological resources and would not result in impairment of archeological resources or values.</p>	<p>previously affected by development of the Keys Ranch. Replacement of the Adobe Barn with a compatible structure, restoration of specimen trees, and restoration of the windmill water and irrigation system would be preceded by additional archeological testing. In the event that previously unknown archeological resources are found, proposed actions would be relocated, if possible, to non-sensitive areas.</p> <p>Any re-evaluation of the boundary closure area would ensure that sensitive resources remain protected.</p>	<p>Staff</p> <p>Archeologist</p>
Ethnographic Resources	<p>There would be no effect on or impairment of any known ethnographic resources. No use is proposed where use is not already occurring, nor would there be any change to current Native American use of existing areas.</p> <p>Although areas near the Keys Ranch have been used for the repatriation of human remains found in the park (in conformance with the Native American Graves Protection and Repatriation Act), they would not be affected by the selected alternative. There would be no impairment of ethnographic resources.</p>	<p>Ongoing consultation with affected tribes will continue to occur as specific implementation plans are developed.</p>	<p>Cultural Resources Branch Chief</p>
Museum Collections	<p>Implementation of the selected alternative will result in a long-term beneficial effect on Keys Ranch and its museum collections.</p> <p>Depending on the number of and reasons for de-accessioning of some of the Keys Ranch collections, there could be negligible to minor adverse effects. These would be coupled with minor to moderate long-term beneficial impacts from managing the Keys Ranch collection and from actions to preserve and supplement oral histories and to display collections, as well as from the development of exhibit and historic furnishings plans.</p> <p>The proposed action would add valuable information to, increase preservation of, and add appropriate materials to the Keys Ranch Collections. There would be no impairment of museum collections.</p>	<p>Systematically inventory, record, identify and assess the artifact assemblages at the Ranch.</p> <p>Secure industrial curator to identify priority objects for preservation and treatment. De-accession cataloged items at the ranch (those that do not belong in the Collection, according to the Museum Management Plan / Curator recommendations).</p> <p>Complete a provenance search for cataloged items in storage. Consider de-accessioning and repatriation of those items to the ranch site on a case-by-case basis.</p> <p>Process the Keys archives, create a finding aid to this material, and make it electronically available.</p>	<p>Museum Curator</p>
Historic Structures	<p>The proposed action would result in systematic repair and/or rehabilitation, a long-term minor to moderate beneficial effect. Other beneficial effects would result from regular monitoring conditions surveys, with minor to moderate beneficial and adverse effects from the construction of a compatible barn structure within the Historic District to serve as either storage or a visitor contact facility.</p> <p>Continued preservation maintenance, including the possible restoration and/or rehabilitation of buildings and structures at Keys Ranch would have no adverse effect</p>	<p>Prepare Historic Structures Reports for the buildings and Historic Furnishings Reports for applicable structures.</p> <p>Historic, native and historic non-native vegetation would be managed to minimize encroachment on and to avoid damage to historic structures.</p> <p>Actions that would be undertaken to preserve the structures would be in conformance with the Secretary of the Interior's standards and would include replacement-in-kind of existing and</p>	<p>Cultural Resources Branch Chief</p>

Resource	Impact	Measures to Avoid, Minimize or Mitigate Impact	Responsible Staff
	<p>on their continued eligibility for or listing on the National Register of Historic Places as part of the Keys Ranch Historic District.</p> <p>There would be no impairment of historic resources.</p>	<p>missing features (with adequate documentation) and/or replacement with compatible materials that would reduce long-term cyclic maintenance needs.</p> <p><u>To ensure that proposed actions would have no adverse effect on Keys Ranch historic structures, and upon the recommendation of the California State Historic Preservation Officer a programmatic agreement would be developed among the park, the California State Historic Preservation Officer and the Advisory Council for historic preservation.</u></p>	
Cultural Landscapes	<p>There would be long-term minor beneficial effects from restoring portions of Ranch setting and from removing or enhancing compatibility of non-historic elements.</p> <p>Additional long-term minor beneficial effects would be realized from greater emphasis on removing, disguising or relocating non-historic elements and from additional information gathering.</p> <p>There would be no adverse effect from proposed actions on the eligibility of any features eligible for the National Register of Historic Places and no impairment of the cultural landscape.</p>	<p>Prepare a Cultural Landscape Report to determine a treatment plan for the area as a whole.</p> <p>Remove or enhance compatibility of non-contributing elements.</p> <p>Identify and maintain the historic landscape to ensure no additional loss of character defining features.</p> <p>Manage native, historic native and non-native vegetation to avoid damage to structures from vegetation encroachment.</p> <p>Develop a Cultural Landscape Report, including recommendations for vegetation/orchard/irrigation management for the ranch.</p>	Cultural Resources Branch Chief
Interpretation	<p>There would be increased beneficial effects from additional opportunities for Keys Ranch interpretation by establishing partnerships to restore ranch features and equipment and from increased tour opportunities.</p> <p>The proposed action would result in moderate improvements in the interpretive program, with a host of new programs, services and the provision of information.</p>	<p>Expand interpretive and educational programming operations.</p> <p>Increase availability of written materials about Keys Ranch.</p> <p>Continue to display representative non-collection items at the Keys Ranch.</p> <p>Maintain some Keys Ranch equipment in working order.</p> <p>Investigate feasibility of stabilizing mills.</p>	Chief of Interpretation
Visitor Access and Circulations	<p>There would be more opportunities (film, additional Keys exhibits, etc.) to experience the Ranch remotely.</p> <p>There would be potential short- to long-term moderate adverse effects if interpretation or education programming was discontinued due to temporary funding shortfalls.</p>	<p>Use historic roads and trails for access, minimizing any new non-contributing additions to the Historic District.</p> <p>Take advantage of opportunities to increase accessibility of Keys Ranch resources.</p> <p>Maintain historic fencing alignments.</p>	Chief of Interpretation Chief Ranger
Wilderness	<p>There would be no permanent impacts to wilderness or wilderness resources.</p> <p>Temporary impacts would include noise and disturbance associated with rehabilitation of historic structures, construction of trail</p>	<p>No actions associated with the selected alternative would occur in designated wilderness.</p>	Chief Resources Chief Ranger

Resource	Impact	Measures to Avoid, Minimize or Mitigate Impact	Responsible Staff
	linkages, and construction or relocation of facilities.		
Park Operations	<p>There would continue to be long-term negligible beneficial effects from administration, use of caretakers; implementation of Fire Management Plan recommendations; non-systematic preservation maintenance; and occasional treatment of non-museum objects at the Ranch.</p> <p>These would be coupled with minor to moderate adverse effects on staff from additional responsibilities associated with encouraging partnerships, restoring buildings and equipment, and from the expanded interpretive program as well as from the need to seek additional funding, some of which could be relieved by hiring a partnerships coordinator.</p> <p>Pending an influx of funding and staffing as needed to support the operations proposed actions would result in better preservation of Keys Ranch resources.</p>	<p><u>Administration</u> Establish funding mechanisms to continue interpretive and educational programming, historic structure stabilization and technical assistance.</p> <p>Upon approval of the plan, develop a list of each aspect of implementation and associated funding sources. Immediately following approval of the plan, prioritize preservation and maintenance, and implementation actions.</p> <p><u>Fire Management</u> Adopt recommendations of Fire Management Plan.</p> <p>Identify and ensure some level of structural and wildland fire fighting resources/response in vicinity of Keys Ranch.</p> <p>Develop structural fire protection strategy for vulnerable resources at Keys Ranch (protection from ignition sources – lightning, wildland fire, arson, physical modifications to environment – defensible space, appropriate equipment on site).</p> <p><u>Maintenance</u> Develop cyclic maintenance plans for all listed buildings and structures.</p> <p>Develop and implement phased priority restoration/maintenance plans.</p> <p>Conduct routine cyclic maintenance to replace building materials as needed.</p> <p>Provide base-funded historic structure stabilization and personnel.</p> <p><u>Security</u> Maintain day use only (restricted) operations.</p> <p><u>Safety</u> Increase safety of operations at Keys Ranch through implementation of staff and volunteer training, tailgate safety sessions and systematic analysis of operations.</p> <p>Determine need for and conduct hazardous materials surveys at the Keys Ranch. Implement recommendations as required under applicable policy and law.</p> <p>Follow existing preliminary investigation report recommendations (mine site clean-up).</p>	All Division Chiefs

Resource	Impact	Measures to Avoid, Minimize or Mitigate Impact	Responsible Staff

Public Involvement

Joshua Tree National Park conducted both internal scoping with appropriate National Park Service staff and external scoping with the public and interested and affected groups, agencies, and tribes to determine the range of issues to be discussed in this Environmental Assessment. Staff of Joshua Tree National Park and resource professionals in the National Park Service Pacific West Region conducted internal scoping. This interdisciplinary process defined the purpose and need, identified potential actions to address the need, determined the likely issues and impact topics, and identified the relationship of the preferred alternative to other planning efforts in the park.

A press release initiating the public scoping process and comment period was issued on April 28, 2005. The press release resulted in articles in the *Desert Trail* (*Keys Ranch Future Eyed* 6-2-05), and *Hi Desert Star* (*Park Probes Public for Keys Ranch Ideas* 5-28-05) and was announced on one of the local radio stations. A public scoping meeting was held on June 8, 2005 at Copper Mountain College in the town of Joshua Tree. Approximately a dozen people attended (most were park staff) and provided comments on the development of this plan.

To facilitate public comments, a visitor comment form was available at the public meeting (see Appendix 4) and in the visitor center, as well as by request during the public scoping period (June 18 – July 17, 2005). At the public meeting, visitors were asked to comment on what they liked, didn't like, what they thought was missing; what expertise they might lend to the preservation of Keys Ranch; what issues they believed most important to its preservation; and to contribute any solutions to the problems presented.

As a result eight public (individual) letters, two organization letters (commercial and non-profit organization representatives) and one agency comment letter were received. In addition, another three people attended the public meeting in addition to the National Park Service staff members present.

Individual comments included:

- Continue to offer high quality ranger-guided tours (2 comments).
- Higher tour prices for continued operation of similar tours would be okay.
- Visitor center exhibits or self-guided tours would not offer the same experience as the ranger-guided tour.
- Liberal access could compromise the safety and security of the ranch.
- Preserve the ranch structures using weathered or used materials.
- Continue to provide a water source for desert animals.
- Consider rehabilitating springs that used to provide additional water.
- Preserve the Studebaker wagon, the corral fence, and the deteriorating house and orchard.
- Continue to increase attention and give higher preservation priority to Keys Ranch.
- Historic photos are available of the adobe barn.
- Highlight Keys' connections to Johnny Lang, John Samuelson and Death Valley Scotty.
- Restore the ability to walk into the Keys Ranch House.
- Restore all structures related to the Keys' era.
- Provide a way to maintain the restoration.
- Involve the local community and state in restoration and maintenance.
- Involve historical societies and the park association to provide labor and money.
- Develop the Keys Ranch as a destination similar to Scotty's Castle in Death Valley.
- Develop partnerships with Copper Mountain College for grant writing, labor, education, etc.
- Provide easy access to the Keys Ranch through a trolley system, or horse drawn wagons. Involve the local horse community.

- Publicize the Keys Ranch story by increasing the number of articles, PowerPoint programs, internet site visits, and a play or musical based on Keys' life. Develop other marketing strategies.
- Restore equipment that is no longer used and which is unique to the area.
- Consider giving living history programs at the Ranch.
- Create a restoration catalog identifying the projects needed to preserve the Ranch in priority order for dissemination to local historical societies, experts and other groups interested in funding or facilitating the preservation of the Ranch.
- Increase the number of activities going on at the Ranch to facilitate an increase in interest for preservation.
- Focus first on Ranch preservation then branch out to other aspects of Keys' influence in park/area.
- Make the Keys family story real.
- Continue to offer supervised visits by art and photography classes.

In addition, there were many comments that noted the significance of the Keys Ranch and the desire/need to continue to preserve it as a unique look back at the region's desert homesteading past and the success of the Keys family.

The California Native Plant Society questioned why the historic clump of non-native invasive giant reed (*Arundo donax*) near the house might be preserved, given its official status as a weed by the State of California.

The USFWS noted that the desert tortoise was likely to be present in the area and that protocol surveys should be conducted.

During the public review period, a second public meeting was held at park headquarters in Twentynine Palms (October 19, 2005). At this meeting, attended by approximately 7 people, park staff discussed the preferred and other alternatives in the Environmental Assessment and invited comments.

This Environmental Assessment was available for a thirty-day public review period from September 25 – October 25, 2005. Approximately six copies of the Environmental Assessment were distributed (mailed to individuals or organizations). The Environmental Assessment was also available on the park's website, located at <http://www.nps.gov/jotr> during the public review period.

Comments on the following issues were received and incorporated into this Finding of No Significant Impact and Errata for attachment to the Environmental Assessment:

- Concern that Giant Reed Grass (*Arundo donax*) is being allowed to remain at Keys Ranch.
- Description of adverse effects (increased potential for non-native plant growth and transmission of seeds) that would also occur with reinitiated use of the agriculturally managed vegetation areas.
- Minor corrections to spelling of some genus and species scientific names.
- Affirmation of the asset of a restored orchard to the Keys Ranch and a reference to local nursery experts and volunteers assisting in the endeavor.

Agency Consultation

Native American Indian Tribes: Letters noticing the Agua Caliente Band of Cahuilla Indians, Cabazon Band of Cahuilla Mission Indians, Chemehuevi Indian Tribe, Colorado River Indian Tribes, Fort Mojave Indian Tribe, Morongo Band of Cahuilla Mission Indians, Soboba Band of Luiseno Indians, Torres-Martinez Band of Desert Cahuilla Indians, Twentynine Palms Band of Mission Indians of California, and the Native American Heritage Commissioner were sent on May 31, 2005 and resent transmitting the Environmental Assessment. No comments were received, despite follow-up by park staff with another letter on October 18, 2005.

United States Fish and Wildlife Service: A scoping letter was sent on May 31, 2005. A follow-up request for concurrence with the determination of *not likely to adversely affect* for Desert Tortoise and *no effect* on other species was sent during the public review period and later followed up via email on December 5, 2005 in conformance with Section 7 of the Endangered Species Act. Based on consultation,

some language in the Environmental Assessment was modified as noted in the Errata. Fish and Wildlife Service concurrence with the determinations of effect was received on December 12, 2005.

California State Historic Preservation Office: Initial notification of the development of the EA was also made to the California State Historic Preservation Office (SHPO) with the mailing of the scoping press release on the plan (May 31, 2005). On October 26, 2005, a request for concurrence with a conditional determination of “no adverse effect” for the actions contained in the comprehensive plan was sent to the State Historic Preservation Officer. A second letter was sent on December , 2006 containing a copy of the Keys Ranch Comprehensive Plan Environmental Assessment. On January 10, 2006 this request was followed up by a request from the California State Historic Preservation Officer that because the potential effects of the Keys Ranch Comprehensive Plan were wide-ranging that a programmatic agreement be developed among the park and the California State Historic Preservation Officer and the Advisory Council for Historic Preservation. This action was added to the impact mitigation section of this document.

IMPAIRMENT DISCLOSURE

In addition to determining the environmental consequences of the preferred and other alternatives, National Park Service policy (*National Park Service Management Policies 2001*) requires analysis of potential effects to determine whether or not actions would impair park resources. To ensure fulfillment of the National Park Service mission, *National Park Service Management Policies* also requires decision makers to consider impacts and to determine in writing (before approving an action) that a proposed action will not lead to impairment of park resources or values.

The fundamental purpose of all units of the National Park Service is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

As a result, National Park Service managers seek ways to avoid or to minimize, to the greatest degree practicable, adverse impacts on park resources and values. Impacts to park resources and values may occur when necessary and appropriate to fulfill the purposes of a park, as long as these impacts do not constitute impairment of the affected park resources and values.

Impairment is an impact that, in the professional judgment of the National Park Service manager, would harm the integrity of park resources or values, including the opportunities that would otherwise be present for enjoyment of these resources or values. Management Policies (National Park Service 2001) provides further guidance for National Park Service decision-makers to use in analyzing whether a proposed action would result in impairment.

An impact is more likely to constitute impairment to the extent that it affects a resource or value whose conservation is

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- Key to the natural or cultural integrity of the park or to the opportunities for enjoyment of the park; or
- Identified as a goal in the park’s general management plan or other relevant National Park Service planning documents.

An impact would be less likely to constitute impairment to the extent that it is an unavoidable result, which cannot reasonably be further mitigated, of an action necessary to preserve or restore the integrity of park resources or values.

As with many of the management actions considered by the National Park Service, the careful balance of sometimes competing park resources and values is an important component of the environmental analysis and decision-making process. All elements of an National Park Service action, however must avoid impairing park resources.

Though providing for the enjoyment of park resources and values by the people of the United States is also a National Park Service mandate, the National Park Service has been directed by Congress that in cases where there is a conflict between conserving resources and values and providing for the enjoyment of them that conservation is considered predominant.

The Environmental Assessment identified and evaluated impacts to a host of park resources and values, an analysis that considered the severity, duration, and timing of direct and indirect impacts. The impacts disclosed herein occur in areas that have long been cornerstones of visitor use. The Environmental Assessment found that there will be no major adverse impacts to a resource or value whose conservation is 1) necessary to fulfill the specific purposes identified in the park's enabling legislation; 2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or 3) identified as a goal in the park's General Management Plan or other relevant planning documents. Consequently, the selected alternative will not result in impairment of park resources or values.

The selected alternative was chosen because it best accomplishes the legislated purposes of the park and the statutory mission of the National Park Service and the purpose and need for the plan.

Upon approval, some portions of the selected alternative will be implemented immediately, while others will be implemented as soon as practicable, pending other requirements, funding and staffing.

FINDING

On the basis of the information contained in the Environmental Assessment as summarized above, it is the determination of the National Park Service that the proposed project is not a major federal action significantly affecting the quality of the human environment. Nor is it an action without precedent or similar to an action that normally requires an Environmental Impact Statement. This conclusion is supported by the environmental analysis and listed mitigation measures, which will reduce or eliminate impacts. This conclusion also included due consideration of public comments. The California State Historic Preservation Officer has recommended and will assist the park in developing a park programmatic agreement to establish a pathway for concurrence with the multiple determinations of effect inherent in the Keys Ranch Comprehensive Plan. Therefore, in compliance with the National Environmental Policy Act, an Environmental Impact Statement will not be prepared.

The conclusions of non-significance are based primarily on the minor scope of the proposed impacts and on the mitigation measures that were included to avoid, reduce or eliminate other potential impacts that could be associated with the selected alternative.

Recommended:

Curt Sauer, Superintendent
Joshua Tree National Park

Date

Approved:

Jonathan B. Jarvis, Regional Director

Date

Pacific West Region